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JOBS IN THE WOODS PROGRAM

FOR WESTERN OREGON

PROGRAMMATIC BIOLOGICAL ASSESSMENT

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PROGRAMMATIC BIOLOGICAL ASSESSMENT

CHAPTER 1 - INTRODUCTION

A. JOBS IN THE WOODS PROGRAM

The Jobs in the Woods (JITW) program is part of the U.S. Fish and Wildlife Service's (Service) contribution to the overall implementation of the Northwest Forest Plan. The Service is required to allocate congressionally appropriated JITW program funds and to direct these funds toward watershed restoration projects in Washington, Oregon, and northern California.

Service offices, through the JITW program, are intended to implement watershed restoration projects on nonfederal lands within the range of the northern spotted owl (*Strix occidentalis caurina*) that (1) employ dislocated timber and forest industry workers to the extent possible, (2) address actions on non-federal lands identified during watershed analyses, (3) support ongoing watershed restoration projects on federal lands, and (4) benefit federally significant plant and animal species that include listed and proposed species, sensitive and at-risk species, migratory birds, anadromous fish and their critical habitats (USFWS 1995). The ecological goals of the program are to restore ecosystem functions and values to natural conditions and achieve ecosystem restoration goals and objectives in concert with other governmental watershed restoration programs in the area affected by the Northwest Forest Plan. Additional program benefits and objectives include encouraging partners (e.g., government entities, private organizations and individuals) to promote environmental education experiences and to foster long-term stewardship of natural resources in the Pacific Northwest.

The Oregon State Office (OSO) and the Klamath Basin Ecoregion Office (KB-ERO) are the Service offices that administer the JITW program in Oregon. Upper Klamath Basin JITW program and project files are available for review at the Klamath Basin Ecoregion Office, 6600 Washburn Way, Klamath Falls, Oregon. All other files are available for review at the U.S. Fish and Wildlife Service, Oregon State Office, 2600 SE 98th Avenue, Suite 100, Portland, Oregon.

B. RATIONAL FOR A PROGRAMMATIC BIOLOGICAL ASSESSMENT

A programmatic BA (BA) approach was determined to be the preferred procedure for adequately analyzing the JITW program to meet the requirements under Endangered Species Act (ESA). The similarity of proposed restoration activities under the JITW program during any fiscal year (FY) allowed

for the categorization of these activities under the following four major project categories[1]: (1) instream habitat restoration, (2) riparian/wetland restoration, (3) fish passage improvements, and (4) upland/forest restoration. The rationale for this approach was that similar environmental impacts could occur from a given project within a project category independent of its location. For example, a fish passage improvement project that proposed to replace a culvert on a stream in Tillamook County would likely have the same potential impacts as a culvert replacement project in Curry County. Additional influencing factors supporting a categorical assessment are: (1) watersheds where restoration activities will occur have undergone preliminary assessments as part of local and/or regional watershed analyses under the Northwest Forest Plan watershed analysis guidelines (Anonymous 1995) or analyses with similar objectives, (2) a state or federal biologist, with local experience in completing similar project activities, is required to be involved in the planning and/or design process for each project, and (3) project coordinators must obtain required regulatory permits and comply with local, state, and federal mandates regarding all aspects of proposed restoration activities.

Therefore, a programmatic BA was prepared for the above main project categories independent of project location and the FY funding period. Future program changes outside the scope of this programmatic BA will result in the preparation of an additional BA to address environmental impacts related to the new changes.

C. ENDANGERED SPECIES ACT

Section 7(a)(1) of the Endangered Species Act of 1973, as amended, (16 U.S.C. 1531 et seq.) requires federal agencies to conserve endangered and threatened species. Section 7(a) (2) requires consultations to insure that any action authorized, funded, or carried out by the Service is not likely to jeopardize the continued existence of listed, proposed or candidate species or result in the destruction or adverse modification of critical habitats. Section 7(c) requires a BA be prepared for major construction projects if any of those species or their critical habitats are present in the proposed action area.

The OSO and KB-ERO have decided to take a programmatic approach for the formal consultation process for the JITW program in Western Oregon. Formal consultation will be conducted with the Service and the National Marine Fisheries Service (NMFS). The programmatic BA will describe the type of proposed restoration activities under the four main project categories along with the impacts and effects to listed and proposed species and their critical habitats. Information supporting the BA will be available for review in the JITW program files at the respective Service office.

The JITW program will be held to a higher standard during the formal intra-Service consultation process. Proposed and candidate species under the Service's jurisdiction will be considered as listed and proposed species, respectively, at the time of consultation. Formal conferencing will occur concurrently with the consultation process. The effects of the JITW program on species of concern will be addressed during the

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[1] Restoration also includes the creation of appropriate habitats under instream, riparian/wetland, and upland/forest restoration project categories.

informal intra-Service consultation process that will conducted during each fiscal year. The combined Oregon Natural Heritage Program species list for the FY 1996 JITW projects is presented in Appendix A. This list is for informational purposes only. It provides information on the range of listed species, proposed species, candidate species, and species of concern that may be affected by restoration activities in and around the various project sites.

Formal conferencing with the NMFS for proposed anadromous fish species will also be conducted during their formal consultation process. Proposed anadromous fish species under formal conferencing include the Oregon coast steelhead (*Oncorhynchus mykiss*) (U.S. Department of Commerce 1996), Klamath Mountains province steelhead (*O. mykiss*) (U.S. Department of Commerce 1996), and coho salmon (*O. kisutch*) (U.S. Department of Commerce 1995).

The NMFS has completed their formal consultation and conferencing (March 4, 1997) for the effects of the JITW program on Umpqua River cutthroat trout (*Oncorhynchus clarki clarki*), Southern Oregon/Northern California coho salmon, Klamath Mountains Province steelhead, Oregon Coast coho salmon, Oregon Coast steelhead, and Lower Columbia steelhead in western Oregon. This document is located in the OSO Integrated Files Section 6610. The programmatic Biological Opinion (BO) states that there is "more than a negligible likelihood of resulting in incidental take of Umpqua River cutthroat trout because of detrimental effects on suspended sediment levels." Based on the information in the programmatic BA, the NMFS anticipates that an unquantifiable amount of incidental take could occur as a result of the actions covered by the programmatic BO.

Jobs in the Woods projects funded in each fiscal year will be informally reviewed by Service and NMFS endangered species biologists to ensure that the constraints in the programmatic BA and BOs are still valid and appropriate with respect to proposed restoration activities and any new project location(s). Projects that do not meet the intent of the BOs will result in the reinitiation of formal consultation for those projects. Formal consultation will also be reinitiated with the Service or NMFS, as appropriate, (1) if any action is modified in a way that causes an effect on a listed species that was not previously considered in the BA and the BOs; (2) new information or project monitoring reveals effects of the action that may affect listed species in a way not previously considered; or (3) a new species is listed or critical habitat is designated that may be affected by the action (50 C.F.R. 402.16). In addition, formal consultation will be reinitiated should the constraints in the programmatic BA and/or BOs become so restrictive as to prevent the implementation of restoration activities at a specific project location(s) with respect to any listed, proposed, or candidate species or their critical habitats. Under this situation, the formal consultation process may be conducted on an individual project basis instead of a programmatic basis. Individual JITW projects that cannot be modified to eliminate or reduce adverse impacts to listed, proposed, or candidate species or species of concern will be withdrawn from the JITW program. Appropriate recommendations will be given to the project coordinator if the project will still be implemented with nonfederal project funds.

CHAPTER 2 - AFFECTED ENVIRONMENTS

Many watersheds in Oregon are in a degraded state from past and present road building, logging, grazing, agricultural, and other land use activities. Storms, floods, and other natural events over the past decades have also caused significant changes and/or adverse impacts in watersheds. In western Oregon, degraded watersheds may occur in Benton, Clackmas, Clatsop, Columbia, Coos, Curry, Deschutes, Douglas, Hood River, Jackson, Jefferson, Josephine, Klamath, Lane, Lincoln, Linn, Marion, Multnomah, Polk, Tillamook, Wasco, and Yamhill counties. Major impacts and problems currently present in western Oregon watersheds include, but are not limited to the following:

- < De-stabilization and compaction of streambanks and upland/forest soils and slopes
- < Increases in sedimentation and erosion rates
- < Loss in instream structural complexity and diversity
- < Decline in anadromous and resident salmonid spawning and rearing habitats
- < Reduction in vegetative composition and diversity in riparian, wetland, upland, and forest habitats
- < Decrease in overall water quality

Watershed restoration projects funded under the JITW program will occur in watersheds on non-federal lands within the range of the northern spotted owl in the above western Oregon counties. Project locations will be within the Deschutes, Klamath, Southwest Oregon, Willamette, or Oregon Coast Province planning and analysis areas as defined in the Record of Decision, page E-19, Figure E-3. Many projects may have more than one stream reach, riparian/wetland area, and/or upland/forest area that may receive restoration treatments under a single project title. Proposed restoration activities for individual projects will fall under one or more of the following main project categories: (1) instream restoration, (2) riparian/wetland restoration, (3) fish passage improvements, and (4) upland/forest restoration. Specific restoration activities under each project category are discussed in more detail in Chapter 3 - Environmental Consequences. It should be noted that the financial resources necessary to complete restoration efforts in all of the watersheds are beyond the funding allocated to the JITW program. Therefore, only a limited number of watersheds would be directly affected.

CHAPTER 3 - ENVIRONMENTAL CONSEQUENCES

The similarity of proposed watershed restoration project activities under the JITW program during any FY allowed for the categorization of these activities under the following four main project categories: (1) instream habitat restoration, (2) riparian/wetland restoration, (3) fish passage improvements, and (4) upland/forest restoration. As stated previously, this approach was taken since similar environmental impacts could occur from a given project within a project category independent of the project location and the fiscal year funding period. Project summaries for the FY 1996 JITW program can be found in Appendix B. The summaries are for informational purposes only. They are part of the programmatic BA to provide a realistic overview of the intended restoration efforts that are generally proposed under the different project categories. Specific restoration efforts will vary by project location and from year-to-year, but these efforts will be only implemented in watersheds where prioritized restoration activities have been identified in appropriate watershed analyses.

The remainder of the chapter will address the type of restoration activities included under the four main project categories. In addition, the environmental consequences to the following subject areas will be discussed respective to the restoration activities under the project categories.

- Terrestrial and Aquatic Habitats
- Fish, Wildlife, and Plants Species
- Cumulative Restoration Effects

PROJECT CATEGORY I - INSTREAM HABITAT RESTORATION

Restoration activities in this project category will restore or improve instream and riparian habitats in degraded watersheds. Activities will focus on increasing and/or improving fish spawning and rearing habitats, instream diversity and complexity, natural hydrologic flow regimes, streambank stabilization, wildlife and plant habitats, and water quality. Specific restoration activities will consist of the following:

- Installation of wood and/or boulder instream structures
- Hydrologic modifications to stream side channels
- Development of off-channel refuge areas
- Installation of bioengineered streambank stabilization structures and the implementation of sedimentation and erosion reduction techniques
- Installation or development of wildlife foraging, breeding, nesting, roosting, and basking structures

PROJECT CATEGORY II - RIPARIAN/WETLAND HABITAT RESTORATION

Restoration activities in this project category will restore or improve riparian and wetland habitats in degraded watersheds. Activities will focus on increasing and/or improving riparian/wetland vegetative

composition and structural diversity, natural hydrologic flow regimes, streambank stabilization, wildlife and plant habitats, and water quality. Specific restoration activities will consist of the following:

- Installation of streambank and/or cross-pasture livestock exclusion fencing
- Installation of off-channel livestock watering facilities
- Installation of livestock stream crossings
- Installation of wood and/or boulder instream structures to establish natural hydrologic regimes in riparian/wetland habitats
- Closure, abandonment, or decommissioning of roads
- Drainage improvements on roads for sedimentation and erosion control
- Reestablishment of natural wetlands and their functions
- Creation of wetlands and their functions
- Installation of bioengineered streambank stabilization structures and the implementation of sedimentation and erosion reduction techniques
- Installation or development of wildlife foraging, breeding, nesting, roosting, and basking structures
- Planting of native riparian and wetland vegetation
- Silviculture treatments
- Control or removal of invasive plant species

PROJECT CATEGORY III - FISH PASSAGE IMPROVEMENTS

Restoration activities in this project category will restore or improve fish passage through, over, or around instream barriers. Activities will focus on modifying existing fish passage barriers to allow for unobstructed passage to former spawning and rearing habitats. Specific restoration activities will consist of the following:

- Installation or modification of fishways
- Reengineering of irrigation diversion structures
- Removal or lowering of log jams and culverts
- External and/or internal modifications to culverts
- Realignment of culverts to stream flows
- Replacement of undersized culverts with appropriately sized culverts
- Replacement of culverts with bridges
- Installation of bioengineered streambank stabilization structures and the implementation of sedimentation and erosion reduction techniques
- Installation or development of wildlife foraging, breeding, nesting, roosting, and basking structures
- Planting of native riparian and wetland vegetation

PROJECT CATEGORY IV - UPLAND/FOREST RESTORATION

Restoration activities in this category will restore or improve upland and forest habitats in degraded watersheds. Activities will focus on increasing and/or improving upland and forest vegetative composition and structural diversity, soil and slope stabilization, wildlife and plant habitats, and water quality. Specific restoration activities will consist of the following:

- Installation of livestock exclusion fencing
- Installation of livestock watering facilities
- Closure, abandonment, or decommissioning of roads
- Drainage improvements on roads for sedimentation and erosion control
- Installation of bioengineered soil and slope stabilization structures and the implementation of sedimentation and erosion reduction techniques
- Installation or development of wildlife foraging, breeding, nesting, roosting, and basking structures
- Planting of native upland and forest vegetation
- Silviculture treatments
- Control or removal of invasive plant species

Terrestrial and Aquatic Habitats

Terrestrial and aquatic habitats will be affected to varying degrees by the restoration activities under each of the main project categories. Common to all activities is the potential for impacts due to the use of heavy equipment to complete restoration efforts in the different habitats. Negative impacts may include soil compaction, damage or removal of overstory and understory vegetation, de-stabilization of soils and slopes, and decreased water quality resulting from sedimentation and erosion. Habitat impacts will be restricted to the local areas in and around project sites. All impacts are expected to be only temporary (i.e., no permanent, long lasting impacts) due to the JITW program requirements associated with project design and planning, experience of project personnel, and the implementation of Best Management Practices (BMPs) (Appendix C) and other state/federal guidelines during all construction phases. Table 1 shows the estimated times required to stabilize soils, slopes, and streambanks; establish or reestablish native vegetation; and eliminate water quality decreases resulting from the implementation of restoration activities. An in-depth programmatic analysis of the impacts to terrestrial and aquatic habitats resulting from restoration activities are presented in Table 2. Suitable and critical habitats will not be adversely impacted by restoration activities under any of the main project categories (Appendix D). Overall, the restoration efforts associated with terrestrial and aquatic habitats will improve the existing conditions at the local level.

Natural materials used in the JITW program will be either donated, purchased, or salvaged. Logs, rootwads, tree tops, and boulders will be obtained from private lands, federal lands, local timber mills, and highway projects. Conifer stands will not be specifically harvested to supply the required wooden materials for any JITW project. Hardwood timber from alder dominated riparian stands may be used occasionally

for instream projects. Boulders will be obtained from non-streambed sources. Any wood or boulder materials collected for specific restoration efforts will be done during appropriate seasonal periods to eliminate or reduce soil and slope disturbances. Wooden materials obtained from approved silvicultural operations, as part of a JITW project, may also be used for habitat structures.

Native vegetation planted in riparian/wetland and upland/forest areas will be obtained from commercial suppliers, except willow (*Salix* spp.) cuttings that may be obtained from existing natural stands. The gathering of willow cuttings should not adversely affect any individual stand. Plants purchased from suppliers will be adapted to grow, to the extent possible, in the environmental conditions (e.g., elevation and range) present on project sites. Plants may also be salvaged from areas where ground disturbances will be occurring on JITW project sites; they will be replanted on the sites following the completion of construction activities.

Although the Service does not have complete control over natural material acquisition, appropriate steps will be taken to ensure that acquired materials will not impact any fish, wildlife, or plant species or their critical habitats. Steps to be taken include the implementation of BMPs and guidelines on all projects, written terms and conditions on Service authorization letters issued to the project coordinators allowing the start of project activities, and follow-up monitoring by the Service or its designated agent during project construction activities.

Project monitoring will also be required for each funded project under the JITW program. Monitoring will ensure that restoration activities implemented at individual project sites are functioning as intended and are not causing unforseen adverse impacts to human health and safety; fish, wildlife, and plant populations; instream, riparian/wetland, and upland/forest habitats; or private and public properties and facilities. Corrective actions, as appropriate, will be taken if potential or actual problems are occurring.

Fish, Wildlife, and Plant Species

Fish and wildlife species may be impacted by restoration activities. Impacts may occur as disturbance (i.e., physical or physiological stresses), displacement, or alteration of habitats. Construction related impacts to fish and wildlife species in and around project sites will be temporary (i.e., no permanent, long lasting impacts). Any disturbance or displacement resulting from heavy equipment and increased human activity will cease immediately following the completion of construction activities. The duration of construction activities will depend on the type and extent of the restoration efforts. Determinations to eliminate or reduce adverse impacts to listed, proposed, and candidate fish, wildlife, and plant species are presented in Appendix D.

Fish and wildlife responses to noise disturbances are not well documented in the literature (EPA 1971, Fletcher and Busnel 1978). The possibility exists that construction activities may induce stresses in a species or certain individuals within the local population, but the extent of induced stresses cannot be determined. Noise levels resulting from the implementation of restoration activities at any individual project site should not increase significantly above the ambient noise levels that would normally occur in nearby

areas from logging, ranching, and farming practices, or from vehicles traveling on nearby roadways[2]. Noise ranges for equipment powered by internal combustion engines, pneumatics, and electricity are shown in Figure 1. Potential noise disturbances associated with restoration activities are presented in Table 1. Moderate noise levels associated with listed restoration activities will be fluctuating and intermittent. High noise levels will also be fluctuating, but these noise levels will be more continuous in nature due to the extent and duration of the listed restoration activities. Noise levels at any individual project site will be attenuated to varying degrees, dependent on the sound frequency, by atmospheric conditions, terrain, ground impedance, foliage and vegetation, and the actual distance between the sound source and potential fish or wildlife species (Aylor 1971, Embleton 1963, Fletcher and Busnel 1978, Ingard 1953, Ingard and Maling 1963). Therefore, we believe that fish and wildlife species should not be significantly impacted by increased noise levels resulting from the implementation of restoration activities.

The timing of construction activities will also eliminate or reduce impacts to fish and wildlife species during critical activity periods, such as migration, breeding, and nesting. The Oregon Department of Fish and Wildlife and the National Marine Fisheries Service (NMFS) require specific timing restrictions on any project involving instream construction activities. Activities will generally be allowed to occur between June and mid-October. Exact timing restrictions will depend upon specific stream reaches. Appropriate timing restrictions (e.g., daily and calendar periods) as set forth in the programmatic BA and/or BOs will help protect terrestrial species, such as the northern spotted owls, marble murrelets (*Brachyramphus marmoratus*), and bald eagles (*Haliaeetus leucocephalus*). Appropriate BA and BO constraints will be strictly adhered to in project areas with documented use or with nearby suitable or critical habitats that may be occupied by listed, proposed, or candidate species. Designated or proposed critical habitats for any listed or proposed species will not be adversely impacted by JITW restoration activities.

Adverse impacts will not occur to any plants that are listed, proposed for listing, or species of concern. Areas containing any of these plant species will be avoided. In addition, a botanical survey will be conducted during appropriate seasonal periods by qualified personnel if any of these plant species are suspected to be present in a project area. Restoration activities will focus on increasing the composition and diversity as well as overall conservation of native plant species. (Refer to the Terrestrial and Aquatic Habitats section in this chapter for additional botanical impact information.)

The beneficial impacts to fish, wildlife, and plant species associated with JITW restoration activities will include, but are not limited to the following:

- Increases in the distribution and abundance of salmonid species
- Increases in the composition, diversity, and abundance of macroinvertebrate, avian, mammalian, amphibian, reptilian and native plant species
- Improvements in land management practices (e.g., grazing and irrigation practices)
- Education and public outreach

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[2] The majority of project locations under the JITW program will be in areas (e.g., semi-urban to rural) associated with ongoing logging, ranching, and farming operations, and often adjacent to existing roads (e.g., primary and secondary highways, light duty and unimproved roads), railroad lines, and electrical transmission lines.

Cumulative Restoration Impacts

The JITW program has and will continue to accomplish the watershed restoration goals and objectives of the Northwest Forest Plan and many local and/or regional watershed plans. The JITW program cannot restore any specific watershed completely, but the completion of restoration projects under the program will contribute to the cumulative increases in the overall health of enhanced watersheds. Restoration activities that have or will occur in western Oregon under the program during FY 1994-1996 are summarized in Table 3. We expect that all restoration activities will result in benefits to many fish, wildlife, and plant species and their habitats.

The cumulative impacts from other federal, state, and private watershed restoration efforts are difficult to correlate with the efforts under the JITW program. Documented information on the locations and extent of restoration activities associated with non-JITW restoration efforts is not readily available at the current time. Since present JITW project locations are widely distributed throughout western Oregon (Figure 2), the cumulative impacts associated with other restoration efforts are not currently considered significant at any local or regional level.

The Service will continue to analyze the cumulative watershed restoration impacts under the JITW program on a fiscal year basis. Future analyses will be conducted on a fifth order hydrologic unit level within respective watersheds in western Oregon. These hydrologic units are located within the United States Geological Survey fourth order hydrologic units identified on the hydrologic unit map for Oregon. Polygons for fifth order units generally range from 50,000 to 200,000 acres. The creation of fifth order units will support land management planning and information sharing among federal, state, tribal, and private entities. The fifth order units will also help to standardize the reporting of watershed restoration activities and will provide a standardized means of quantifying the effects of these activities within any specific watershed (State Service Center for Geographic Information Systems, Internet web page, http://www.sscgis.state.or.us/, February 11, 1997). An additional BA will be written if cumulative analyses show significant adverse impacts are occurring in any fourth order hydrologic unit within the state resulting from the implementation of watershed restoration activities on federal, state, tribal, and/or private lands.

CHAPTER 4 - EFFECT DETERMINATIONS

During each fiscal year, the JITW program staffs will meet with the endangered species (ES) staffs from the Service and NMFS, as appropriate, to discuss the current JITW funded projects informally. Information on the restoration activities and new project locations will be provided to correlate with the best available information on the listed species that may be affected by actions within the current program year[3]. A consultation table, similar to the format in Table 4, will be produced to record the effect determinations. The JITW program staffs will then provide the ES staff(s) with specific reasons for the determinations of effects in a similar format to Table 5. A final determination of effects will be prepared by the ES staffs with respect to the terms and conditions, and reasonable and prudent measures addressed in the programmatic BOs. Projects that do not meet the intent of the BOs will result in the reinitiation of formal consultation for those individuals projects.

[3] ONHP (1996) species lists will be obtained for each county or individual project location on a fiscal year basis.

CHAPTER 5 - CONCLUSIONS

Formal programmatic consultation and conferencing are requested for effect determinations for the following species in western Oregon. One or more of these species may be present in or near proposed or future JITW project locations. This request is to concur on the species specific constraints to eliminate or reduce disturbance or take as presented in the programmatic BA. The constraints will be incorporated in Service authorization letters (i.e., notice to start project implementation) to local project coordinators. Coordinators must receive an authorization letter before they are able to use JITW project funding. Coordinators must also follow appropriate BMPs and guidelines to remain in compliance. Failure to do so will result in the withdrawal of all or the remaining JITW project funding.

LISTED:

Birds	Species Name	Status*
Marbled murrelet	*Brachyramphus marmoratus*	CH T
Aleutian Canada goose	*Branta canadensis leucopareia*	T
Western snowy plover	*Charadrius alexandrinus nivosus*	T
Peregrine falcon	*Falco peregrinus*	E
Bald eagle	*Haliaeetus leucocephalus*	T
Brown pelican	*Pelecanus occidentalis*	E
Northern spotted owl	*Strix occidentalis caurina*	CH T
Mammals		
Columbian white-tailed deer	*Odocoileus virginianus leucurus*	E
Plants		
Applegate's milk-vetch	*Astragalus applegatei*	E
Howellia	*Howellia aquatalis*	T
Western lily	*Lilium occidentale*	E
Bradshaw's lomatium	*Lomatium bradshawii*	E
Nelson's checkermallow	*Sidalcea nelsoniana*	T
Fish		
Shortnose sucker	*Chasmistes brevirostris*	E
Lost River sucker	*Deltistes luxatus*	E
Umpqua River cutthroat trout	*Oncorhynchus clarki clarki*	E
Oregon chub	*Oregonichthys crameri*	E

PROPOSED SPECIES:

Fish		
Coho salmon[1]	*Oncorhynchus kisutch*	PT
Steelhead[2]	*Oncorhynchus mykiss*	PT

Plants		
Golden Indian paintbrush	*Castilleja levisecta*	PT

CANDIDATE SPECIES:

Amphibians and Reptiles	
Oregon spotted frog	*Rana pretiosa*
Fish	
Coho salmon (Lower Columbia River)	*Oncorhynchus kisutch*
Steehead (Middle Columbia River)	*Oncorhynchus mykiss*
Bull trout	*Salvelinus confluentus*
Plants	
Umpqua mariposa-lily	*Calochortus umpquaensis*
Willamette daisy	*Erigeron decumbens* var. *decumbens*
Gentne's fritillaria	*Fritillaria gentneri*
Cook's lomatium	*Lomatium cookii*
Rough popcorn flower	*Plagiobothrys hirtus*

* - (E) - Listed Endangered (T) - Listed Threatened (CH) - Critical Habitat has been designated for this species
(PT) - Proposed Threatened

[1] - Southern Oregon, Northern California, and Oregon Coast

[2] - Klamath Mountains Province, Lower Columbia, and Oregon Coast

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